WHAT IS CLAIMED IS:

1. A vehicle speed control system for a vehicle, comprising:

a lateral acceleration sensor sensing a lateral acceleration of the vehicle;

a vehicle speed sensor sensing a vehicle speed of the vehicle;

a target vehicle speed setting device for setting a target vehicle speed;

a drive system generating drive force of the vehicle; and

a controller connected with said lateral acceleration sensor, said vehicle speed sensor, said target vehicle speed setting device and said drive system, said controller,

calculating a correction quantity based on the lateral acceleration and the vehicle speed,

calculating a command vehicle speed on the basis of the vehicle speed, the target vehicle speed, a variation of the command vehicle speed, and the correction quantity, and

controlling said drive system to bring the vehicle speed closer to the command vehicle speed.

2. The vehicle speed control system as claimed in claim 1, wherein said controller determines whether the vehicle is traveling on a curved road, and said controller determines the variation of the command vehicle speed at the time after the traveling on the curved road is terminated, on the basis of one of a curve-terminated vehicle speed at the time when the curved road traveling is terminated and a start-end deviation between the vehicle speed at the time when

the vehicle starts traveling on a curved road and the vehicle speed at the time when the curved road traveling is terminated.

3. The vehicle speed control system as claimed in claim 1, wherein said drive system includes an engine system with a continuously variable transmission (CVT) and a brake system.

4. The vehicle speed control system as claimed in claim 2, wherein said controller determines that the curved road traveling is terminated when the correction quantity returns to zero after the correction quantity takes a value except for zero.

5. The vehicle speed control system as claimed in claim 2, wherein said controller calculates the variation of the command vehicle speed from a map stored in said controller and an absolute value of a deviation between the vehicle speed and a maximum value of the command vehicle speed.

6. The vehicle speed control system as claimed in claim 5, wherein the map for calculating the variation performs characteristics that the variation is increased according to the increase of the absolute value when the absolute value of the deviation is within an intermediate range, that the variation is set at a first constant value equal to a maximum value of the variation in the intermediate range when the absolute value is greater than a maximum value of the absolute value in the intermediate range, and that the variation is set at

a second constant value equal to a minimum value of the variation in the intermediate range when the absolute value is smaller than a minimum value of the absolute value in the intermediate range.

7. The vehicle speed control system as claimed in claim 1, wherein said controller calculates the command vehicle speed at predetermined time cycles.

8. A vehicle speed control system comprising:

a command vehicle speed variation determining section that calculates a command vehicle speed variation on the based of a vehicle speed and a target vehicle speed set by a vehicle operator;

a lateral acceleration vehicle speed correction quantity calculating section that detects a lateral acceleration of a vehicle and calculates a correction quantity from a predetermined characteristic and the lateral acceleration;

a controlling section that controls a drive system of the vehicle so as to bring the vehicle speed closer to a target vehicle speed; and

said command vehicle speed variation determining section determining the command vehicle speed variation at the time after the traveling on the curved road is terminated, on the basis of one of the vehicle speed at the time when the curved road traveling is terminated and a deviation between the vehicle speed at the time when the vehicle starts traveling on the curved road and the vehicle speed at the time when the curved road traveling is terminated, instead of calculating on the based of a vehicle speed and a target vehicle speed set by a

vehicle operator.

9. The vehicle speed control system as claimed in claim 8, wherein said command vehicle speed variation determining section determines the command vehicle speed variation at the time when the curved road traveling is terminated from the vehicle speed at the time of termination of the curved road traveling and a characteristic that the command vehicle speed variation becomes smaller as the vehicle speed becomes smaller.

10. The vehicle speed control system as claimed in Claim 9, wherein said command vehicle speed variation determining section determines the command vehicle speed variation at the time when the curved road traveling is terminated from a deviation between the vehicle speed at the time when the curved road traveling is started and the vehicle speed at the time of termination of the curved road traveling, in accordance with a characteristic that the command vehicle speed variation becomes larger as the vehicle speed becomes larger.

11. A vehicle speed control system for a vehicle, comprising:

a command vehicle speed variation determining section that calculates a command vehicle speed variation on the basis of a deviation between a vehicle speed and a target vehicle speed set by an operator;

a correction quantity calculating section that detects a lateral acceleration of the vehicle and

calculates a correction quantity according to the lateral acceleration;

a command vehicle speed calculating section that calculates a command vehicle speed by subtracting the correction quantity from a first value calculated from at least one of a target vehicle speed set by a vehicle operator and a second value calculated from the vehicle speed and the variation of the command vehicle speed; and

said command vehicle speed variation determining section determining the correction quantity so that the correction quantity becomes smaller as the vehicle speed becomes higher.

12. The vehicle speed control system as claimed in claim 11, wherein said correction quantity calculating section calculates the lateral acceleration from the vehicle speed and a value obtained by processing one of a steer angle and a yaw rate by means of a low-pass filter, calculates the correction quantity according to the lateral acceleration, and varies the correction quantity by varying a cutoff frequency of the low pass filter according to the vehicle speed.

13. A vehicle speed control system comprising:

a controller,

determining whether the vehicle is traveling on a curved road,

determining a variation of the command vehicle speed at the time after the traveling on the curved road is terminated, on the basis of one of the vehicle speed at the time when the curved road

traveling is terminated and a deviation between the vehicle speed at the time when the vehicle starts traveling on the curved road and the vehicle speed at the time when the curved road traveling is terminated, and

controlling a drive system of the vehicle so as to bring the vehicle speed closer to the command vehicle speed.

14. A method for controlling a vehicle speed of a vehicle, comprising:

calculating a command vehicle speed variation on the basis of a deviation between a vehicle speed and a target vehicle speed set by an operator;

detecting a lateral acceleration of the vehicle;

calculating a correction quantity according to the lateral acceleration;

calculating a command vehicle speed by subtracting the correction quantity from a value calculated from at least one of a target vehicle speed set by a vehicle operator and a value calculated based on the vehicle speed and the command vehicle speed variation; and

determining the correction quantity so that the correction quantity becomes smaller as the vehicle speed becomes higher.

15. A vehicle speed control system for a vehicle, comprising:

detecting a vehicle speed of the vehicle;

detecting a lateral acceleration of the vehicle;

calculating a correction quantity based on the lateral acceleration and the vehicle speed;

calculating a command vehicle speed on the basis of the vehicle speed, a target vehicle speed, a predetermined variation of the command vehicle speed, and the correction quantity; and

controlling a drive system to bring the vehicle speed closer to the command vehicle speed.